

ABSTRACT OF THE DISCLOSURE

A printing method and apparatus (100) for pre-exposing a digital watermark along a length of photosensitive medium at the time of manufacture is disclosed. The printing apparatus has an illumination source (60) for providing an exposure illumination, first and second LCD spatial light modulators (90a, 90b) for modulating the exposure illumination to form first and second exposure patterns according to image data, combining optics providing a single output path for directing both first and second exposure patterns onto the photosensitive medium and transport means for providing, during exposure, lengthwise displacement of the photosensitive medium with respect to the output path. The first and second exposure patterns form, lengthwise along the photosensitive medium, a latent image with modulated stripes having a predetermined intensity corresponding to the exposure patterns.